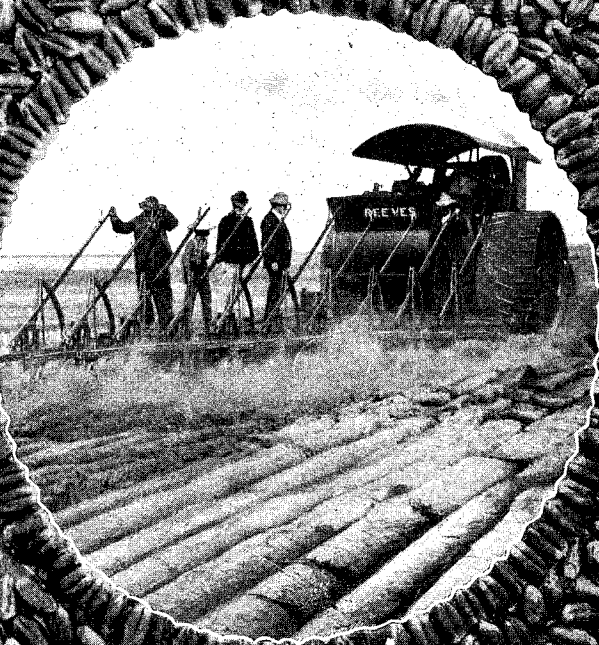


# LAND AND COLONIZATION IN ALBERTA



ISSUED BY THE DIRECTION OF  
HON. DUNCAN MARSHALL  
MINISTER OF AGRICULTURE  
EDMONTON ALBERTA



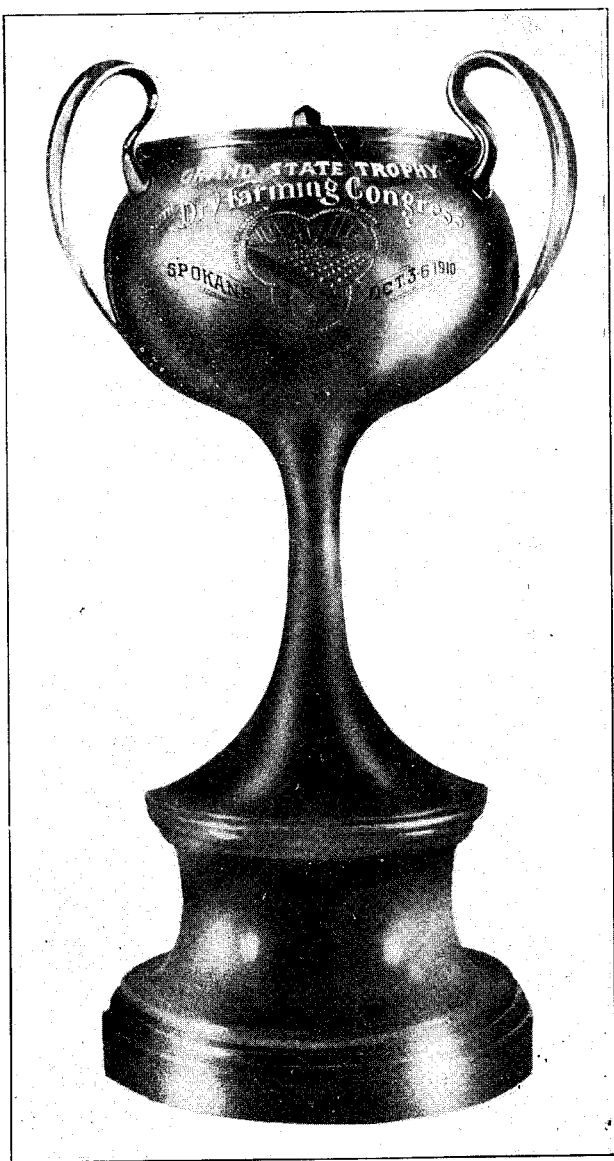
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# *Land and Colonization in Alberta*



ISSUED BY THE DIRECTION OF  
HON. DUNCAN MARSHALL  
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EDMONTON ALBERTA

62.10.6/11



**First Prize**

Awarded to the Province of Alberta for Best Display Exhibit of any State or Province at the International Dry Farming Congress held at Spokane, Wash., Oct. 3-9, 1910.

# THE PROVINCE OF ALBERTA

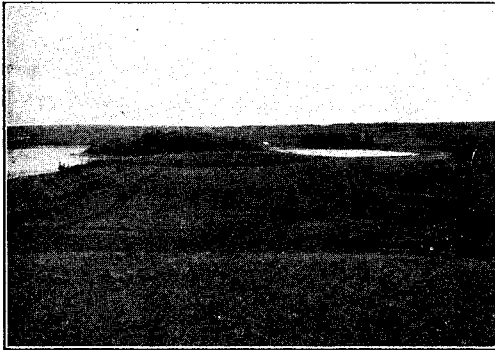


HE natural features of Alberta combine the beauties of Prairie and Mountain Scenery.

For three hundred miles open and wooded plains spread out in vast level reaches, and then climb over softly rounded mounds that grow larger and sharper till they break into jagged points and serried ridges, and at last rest upon the base of the Rocky Mountains.

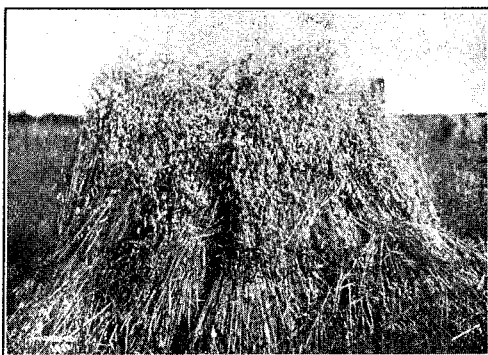
These rounded hills that join the Mountains to the Prairies are called foot hills. They are so distinctive and unique a feature of the country that Alberta is known as the Foothill Province.

Alberta is a vast sloping plateau lying east of the Rocky Mountains and stretching northward from the International Boundary line to the 60th parallel of north latitude and eastward to longitude 110, the boundary line separating the Province from Saskatchewan. In the Canadian system of land surveys this line is called the fourth meridian. The area, therefore, is roughly speaking, 800 miles by 300 miles; actually the Province contains 253,540 square miles, or 162,755,200 acres; of this 1,510,400 acres are under water, leaving 160,755,200 acres dry land.



Farm Land Scene.

Allowing the odd sixty million acres for the rough land of the eastern slope of the Rocky Mountains, other mountains and hills, together with other waste places that will not likely be suitable for cultivation, there still remains the large amount of 100,000,000 acres available for settlement.



A Sure Crop in Alberta.

Of this amount about 2,884,039 acres were actually in crop during 1913. Thus only about three per cent. of the arable land has been brought under the plow, a fact which suggests the vast agricultural possibilities of the Province.

#### COMPARATIVE STATEMENT OF AREAS

Alberta .....	253,540	square miles		
Great Britain and Ireland	121,391	"	"	
France .....	207,054	"	"	
Germany .....	208,780	"	"	
Austria-Hungary .....	241,433	"	"	
New England States, Maine, New Hampshire, Vermont, Massachus- etts, Rhode Island, Con- necticut, New York, New Jersey, and Penn- sylvania .....	165,745	"	"	

#### SOIL CULTIVATION

The uniform fertility of the soil in Alberta cannot be exaggerated. It consists of a marly clay subsoil varying from a few feet on the hills and ridges to great depths on the plains. Overlying this is the thick mantle of black or brown vegetable mould which Professor Shaw, of the Orange Judd Farmer, says, "is worth more than

all the mines in the mountains from Alaska to Mexico, and more than all the forests from the United States to the Arctic Sea, vast as they are." Its worth cannot be measured in acres alone. The measure of its value is the amount of nitrogen, potash and phosphoric acid it contains; or in other words, its producing power. Like the whole of the prairie region of Western Canada the country has not been subjected to serious geological disturbances within recent time, and consequently the decayed remains of the luxuriant vegetation of centuries is compounded in the soil. The same authority quoted above makes the further statement that one acre of the average soil of Alberta is worth more than twenty acres of the



A Fodder Crop

average soil along the Atlantic seaboard. The man who tills the former can grow twenty successive crops without much diminution in the yields, whereas the person who tills the latter must pay the vendor of fertilizers half as much for materials to fertilize an acre as would buy the same in Alberta in order to grow a single remunerative crop.

#### CLIMATE AND AGRICULTURE

The value of climate in relation to agriculture is as important as the chemical nature of the soil. No person in Alberta should be anxious to apologize for the climate of the Province. Good as the soil is it never would have won the supremacy in grain production were it not for the purity of the air, temperature and equilibrium in precipitation. The value of pure air to successful agriculture is almost as important as it is for the health of the popula-

tion. It prevents the rapid decay and transformation of inert or stored fertility, thus virtually precluding the waste of nature's capital.

The cold temperature of the summer nights is the cause of the large relative yields and unexpected quality of the grain. In the judgment of the best agriculturalists the yield would be lessened proportionately to an increase in the temperature of the summer nights.



He who by the plow now thrives,  
Rides a spring seat, and drives.

The relatively light precipitation is a further boon to the Alberta farmer. The rainfall throughout the province varies from fifteen to twenty inches which with forty inches in the British Isles or thirty inches in Ontario seems insufficient, but it is enough to grow good farm crops when intelligently tilled, and not too much to leach the soil. If the quantity of the rain were distributed equally throughout every month in the year the comparatively light fall would be insufficient. But as pointed out in a subsequent chapter, rain comes in Alberta just when it is needed in the months of May, June, July and August, the growing season.

#### COST OF BREAKING LAND

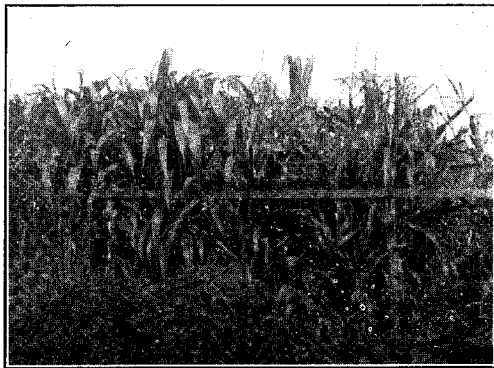
The initial cost of preparing land for crops is an item worthy of consideration by every intending settler. The open prairie land can be quickly broken and prepared for seeding at a minimum of expense, because there are practically no stones or anything else to delay the work of plowing. Steam plowing outfits work to perfection in this soil. The cost of breaking varies according to conditions at from \$3 to \$5 per acre. In the park country the cost of breaking and clearing the land of trees and brush is somewhat higher than on the open prairie, but it has this distinct advantage over the prairie land that it can be broken in the



spring and an excellent crop of oats, wheat or barley obtained the same season. Additional land can be broken after seeding and prepared for another year; or, if thought best, sown to winter wheat. In the extreme south where it is almost all open prairie the sod is tougher and is best broken shallow, say, two and a half to three inches deep, well compressed with a land roller or log drag and then backset in August. This makes a fine preparation for winter wheat, or, if preferred, spring wheat the following year, and means a crop ranging from thirty to fifty bushels per acre.

### CEREAL PRODUCTION

Alberta is the last great wheat belt of the American continent. The states of the Union that formerly produced wheat are now producing corn almost exclusively. Ohio, Indiana, Iowa, and other States of the Middle West, will always remain the corn belt of the continent while the Provinces of the Canadian Northwest will as surely remain the great wheat producers. The whole Province lies south of the wheat line which bends from the Mississippi northward to the valley of the Peace, reproducing during the period of vegetation the summer heats of New Jersey and Ohio.



Fodder Corn in Alberta.

The wheat areas of the world are becoming exhausted or utilized for other crops. Consumption of wheat is increasing at a greater rate than production and an era of high prices is in sight. This scarcity is Canada's opportunity, and she is quickly taking a leading place in supplying bread to the ever-increasing millions of America and Europe, and while marvelous

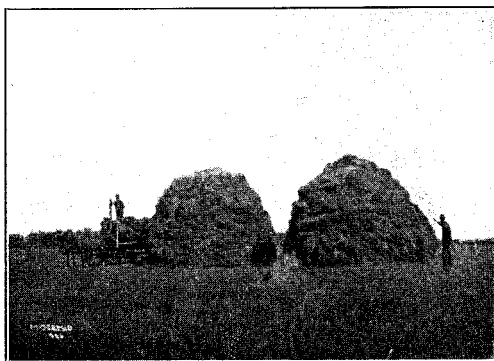
strides have been made in the facilities for transportation of agricultural products, yet the real solution of the problem is the bringing the population to the food rather than the food to the population. The vision that meets us here is one of ample land awaiting man and of possibilities of agricultural production which can be realized only by augmented immigration. Before and above all of what transport has done, and may yet do to carry agriculture across the sea, the more reasonable prospect is the settlement of these wide areas by a population resting on the soil which this great province offers.



Alberta No. 1 Red.

#### LURE OF WHEAT

The increase in wheat production in Alberta in the last few years is but an index of the great development that is bound to follow in



the next decade. Below is given a statement showing the rapidity with which our wheat industry is advancing. The truth is that our wheat lands have been discovered and nothing can stem or turn aside the stream of immigration that has set in from the United States and the Homeland. Those who come now may get cheap or free lands according to their means and choice of location, and will soon be in a position to take advantage of the era of prosperity that seems assured for the next few years. The land is going quickly, but there are millions of acres still left as productive and fit for settlement as any already taken, and which will soon be reached by railways.

#### NOTABLE EXAMPLES

Marcillous Bolinger, Gleichen, Alta. Forty (40) acres of Oats. One hundred and forty-one (141) per acre. Thirty (30) acres of Wheat, fifty (50) bushels per acre. Weighing sixty-six (66) pounds.

C. S. Noble, Noble, Alta. Three hundred and twenty (320) acres Flax. Twenty-seven and half ( $27\frac{1}{2}$ ) per acre. Wheat thirty-six (36) bushels per acre. Oats one hundred and seven (107) per acre. Barley fifty-one (51) per acre.

Charles R. Tillensen, Lindsville, Alta. One hundred and five (105) acres Oats. Seventy (70) bushels per acre.

N. E. Renkenberquer, Barons, Alta. Marquis Wheat, forty-four and three-quarter ( $44\frac{3}{4}$ ) bushels per acre.

Harry J. Quinn, Milk River, Alta. One hundred (100) acres of Marquis Wheat. Forty-one and a quarter ( $41\frac{1}{4}$ ) bushels per acre.

Leffingwell and Egan, Warner, Alta. Forty (40) acres of Oats. One hundred and ten (110) per acre.

Tenny Brothers, Section 12-4-17, North-east of Warner. Forty (40) acres of barley. Sixty-five (65) bushels per acre.

John D. Davidson, Coaldale, Alta. One hundred (100) acres Wheat. Forty-six (46) bushels per acre.

George Jackson, Strathmore. Section 12-23-26. Twelve (12) acres of Oats. One hundred and thirty (130) bushels per acre.

A. J. Mills, Bowville. Forty (40) acres of Barley. Fifty-six (56) bushels per acre.

I. B. Roberts, Raymond, Alta. Twenty (20) acres of two-rowed Barley. Sixty (60) bushels per acre.

Fritz Sick, Wells Siding. Eighty (80) bushels of Oats per acre.

# Summary of the Acreage and Yields of the Leading Grains During the Last Ten Years

	YEAR	Crop area in acres	Total yields in bushels	Average yield per acre
Estimated ....	1913	1,000,030	19,000,570	19.00
	1912	957,874	17,434,774	18.20
	1911	757,493	15,730,238	20.75
	1910	450,493	5,697,956	12.85
	1909	324,472	6,155,455	18.97
Spring Wheat ..	1908	212,677	4,001,504	18.81
	1907	123,935	2,261,610	18.25
	1906	115,502	2,664,661	23.07
	1905	75,353	1,617,505	21.46
	1904	47,411	786,075	16.58
Estimated ....	1913	77,299	1,395,382	18.00
	1912	120,811	2,395,875	19.83
	1911	182,671	4,336,749	23.74
	1910	142,467	2,206,564	15.48
	1909	102,167	2,312,344	22.63
Winter Wheat ..	1908	104,956	3,093,422	29.47
	1907	83,965	1,932,925	20.66
	1906	61,625	1,301,359	21.11
	1905	32,174	689,019	21.41
	1904	8,296	152,125	18.33
Estimated ....	1913	1,267,130	49,418,070	39.00
	1912	971,969	37,085,234	38.15
	1911	669,827	27,604,993	41.21
	1910	492,589	12,158,530	24.68
	1909	693,901	24,819,661	35.76
Oats .....	1908	431,145	15,922,974	36.93
	1907	307,093	9,247,914	30.11
	1906	335,728	13,136,913	39.12
	1905	242,801	9,514,180	39.18
	1904	180,698	5,609,496	31.04
Estimated ....	1913	376,698	10,547,544	28.00
	1912	225,055	6,287,112	27.94
	1911	103,302	3,037,584	29.41
	1910	90,901	1,889,509	20.79
	1909	107,764	3,310,332	30.72
Barley .....	1908	77,876	1,949,164	25.03
	1907	54,698	1,082,460	19.78
	1906	73,588	2,157,957	29.32
	1905	64,830	1,773,914	27.36
	1904	61,549	1,608,241	26.12
Estimated ....	1913	65,021	715,231	11.00
	1912	112,776	1,196,416	10.60
	1911	16,549	153,908	9.30
	1910	15,271	46,155	3.02
	1909	12,479	131,531	10.54
Flax .....	1908	9,262	73,762	7.96
	1907	6,488	50,002	7.87
	1906	3,647	38,491	10.65
	1905	581	8,337	14.34
	1904	367	5,003	13.63
		Total crop area	Total yield of grain	
1913 .....		2,809,310	81,535,000	
1912 .....		2,391,752	64,465,058	
1911 .....		1,732,648	50,907,531	
1910 .....		1,193,261	22,027,184	
1909 .....		1,242,644	36,761,493	
1908 .....		837,641	25,073,147	
1907 .....		576,821	14,588,852	
1906 .....		591,614	19,333,266	
1905 .....		415,917	13,607,374	
1904 .....		298,433	8,163,366	

## RAINFALL

The quantity of rain is not less important than the measure of heat for agriculture and the permanent occupation of any country. Prof. Blodgett, of the Smithsonian Institution, who laid the foundation of American climatology and whose researches are classics in this branch of science, pointed out many years ago, that there were no dry areas in the plains east of the Rocky Mountains, north of the forty-seventh parallel of latitude. After the Bad Lands and the Coteau of Missouri are passed the level of the prairies descend and the rainfall increases. Cactus and sage brush give place to the nutritious bunch grass of the Southern Alberta ranch lands, and as we proceed northward, to heavier and taller grass, and forest.



First Crop on a Homestead.

The rainfall is copious and comes in greatest quantity during the growing season when it is most needed, and ceases just when the harvest is due as will be easily understood from a study of the following tables:

Seeding Season	Growing Season	Harvesting and Threshing Season
January ...1.02	May .....3.85	September ..80
February ...1.03	June .....3.06	October ....1.24
March .....92	July .....5.23	November ..1.74
April .....2.05	August ....1.73	December ..1.03

There are no rains or slushy weather in the winter season. In the southern portion of the province snow falls but does not stay. Horses, cattle and sheep graze out all winter. They scratch the dry snow off the grass and grow

fat. In the northern portion the snow falls in depths varying from six to eighteen inches and remains from the beginning of December to the beginning of April. Spring opens at the same time along the immense line of plains from the Mackenzie to Montana.

#### ANNUAL PRECIPITATION FROM 1910 TO 1912 INCLUSIVE.

Stations.	1910	1911	1912
Alix .....	*10.29	22.34	20.15
Athabasca Landing .....	*16.49	17.03	12.38
Banff .....	16.32	19.17	*19.07
Bardo .....	*10.49	16.94	13.85
Bismark .....	*11.68	*30.18	17.21
Bittern Lake .....	*13.80	20.10	18.81
Caldwell .....	.....	37.04	*18.02
Calgary .....	12.03	19.99	*20.14
Campsie .....	*14.02	17.43	*10.70
Cardston .....	*13.20	*27.84	18.19
Daysland .....	*10.31	*.65	20.87
Didsbury .....	*17.48	23.35	22.02
Edmonton .....	14.43	20.67	20.18
Endiang .....	.....	*15.78	17.77
Fort Vermilion (1) .....	*1.69	*11.57	9.81
Fort Vermilion (2) .....	.....	*13.29	*10.18
Gleichen .....	*9.41	*13.63	*10.34
Halkirk .....	*10.04	20.69	21.63
Harmattan .....	*12.09	*19.13	22.62
High River .....	*9.33	17.03	*8.90
Hillsdown .....	21.25	23.43	*16.30
Jumping Pond .....	12.80	*10.13	*27.58
Lacombe Ex. Farm .....	13.28	21.44	21.83
Lethbridge Ex. Farm .....	*7.41	21.19	13.21
Lineham .....	.....	13.46	23.68
Loch Sloy .....	*7.45	24.70	.....
Loveland .....	*35.70	*14.33	*20.44
Lunnford .....	*14.37	19.63	18.14
Lyndon .....	.....	23.73	23.86
Macleod .....	*8.57	24.34	17.29
Macleod Police .....	*8.17	20.52	12.71
Mayercroft .....	.....	22.36	18.27
Medicine Hat .....	*6.45	*16.04	*9.78
Okotoks .....	*10.86	15.41	17.54
Pakan .....	*23.06	14.56	*15.77
Peace River Crossing .....	*10.98	*17.17	*5.38
Pembina .....	*6.89	*18.52	*11.71
Pekisko .....	.....	*24.02	25.68
Pincher Creek .....	*10.82	*19.26	*9.40
Ponoka .....	*14.61	20.10	*14.01
Seven Persons .....	.....	*17.53	9.75
Sion .....	*19.79	24.36	*15.70
Three Hills Creek .....	*8.49	*17.13	.....
Watfield .....	13.83	19.00	17.03
Wetaskiwin .....	*17.40	36.50	*12.51

\*Reports cover only part of the year.

#### NATURAL VEGETATION

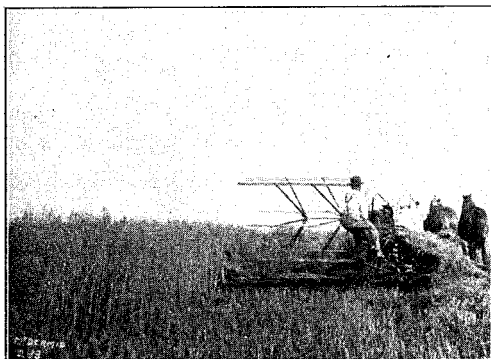
The natural vegetation of Alberta proves its suitability and potentiality as a grain producer.

The variety and succession of the numerous species of native grasses secure a long and uninterrupted period of rich pasturage from spring to autumn. In the south live stock pasture in the plains throughout the winter. The "Buffalo Grass" and the "Bunch Grass"

cures on the ground during the winter and affords excellent feeding until the spring comes. In the north the grasses are taller and thicker but do not cure. There is no difficulty, however, in putting up large quantities in stacks around which stock will feed during the winter and grow fat. The plains of Alberta, both in the southern and in the Peace River districts, were the favorite wintering grounds of the vast herds of buffalo that thronged the prairies in the early days before these animals became extinct. At the present time a herd of wood buffalo are flourishing between the Hay River and Lake Athabaska.

### MARKETING

Splendid provision is made under Canadian law for the protection of the farmer in marketing his products. The grain trade is regulated by the Manitoba Grain Act of 1900 and secures the greatest possible immunity from abuses that may arise in connection with the grain business.



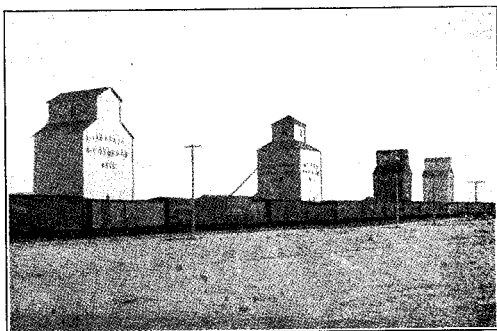
A Record Yield.

In many communities further production is discouraged by reason of the fact that the products cannot be easily marketed or because they are marketed at a loss. This is a problem which has gone far towards solution in Alberta, where under beneficial governmental supervision a system of grain standardisation and an elevator organization fostered in the interests of the farmers have been carried out in a manner which obviates the usual difficulties.

A further step in co-operation amongst the farmers of Alberta has recently been taken, embodied in the statute known as the "Alberta

Farmers' Co-operative Elevator Company Act". The company is formed of farmer shareholders, and an elevator may be established by it at any shipping point which has tributary to it a certain amount of grain. The Government will loan to the company eighty-five per cent. of the cost of erection of an elevator, or for the purpose of extending or remodelling.

The fundamental principle of co-operation has thus been firmly established amongst the farmers of the province.



Farmers Co-Operative Elevators.

## RAILROADS AND TELEPHONES

### Railroads

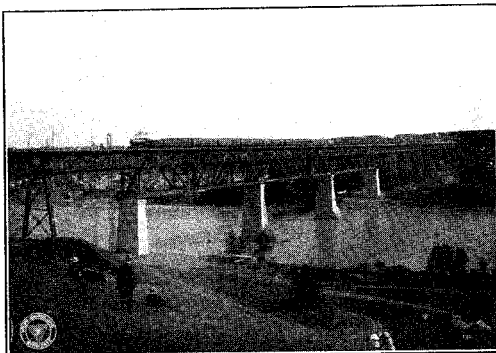
The enormous increase in grain production in the Province of Alberta during the past decade would have been impossible but for the operation of a new factor in the shape of railroad transportation facilities.

Three transcontinental lines traverse the province from east to west. The Canadian Northern, the Grand Trunk Pacific and the Canadian Pacific Railways have lines which converge at Edmonton, the provincial Capital, and the two former are racing to the Pacific Coast by the way of the Yellowhead Pass. The Canadian Pacific Railway reaches Vancouver by way of Calgary and Kicking Horse Pass. Construction is proceeding at a tremendous rate in the comparatively undeveloped northern portion of the Province, many lines in various stages of completion diverging from Edmonton to the north, north-east and north-west, foreshadowing a rapid opening up of the rich north country.

### Telephones

Alberta was the first Province in Canada to own and operate its own telephone system.





Permanent Railway Facilities.

At the present time there are in operation 8,665 miles of long distance line, and about 11,000 miles of rural or farmers' lines, while no less than 22,000 subscribers receive the benefit of the system.

#### INFORMATION FOR SETTLERS

Immigrants or settlers arriving in Winnipeg will receive free information as to the lands open for entry at the office of the Commissioner of Immigration, Mr. J. Bruce Walker.

Information may also be obtained at any Dominion Lands Office in Alberta. Any information respecting land open for entry in the land district in which the office is situated will be cheerfully and fully given to anyone making application. Maps, plans of townships, showing lands open for entry may be obtained at the Dominion Lands Office.

Full information respecting the land, timber, coal and mineral laws may be obtained on application to the Superintendent of Immigration, Department of Interior, Ottawa; the Commissioner of Immigration, Winnipeg, Manitoba; the Publicity Commissioner of Alberta, Edmonton, and the Dominion lands agents as below:

Agent.	Address and District.
A. Norquay .....	Edmonton.
W. E. Elliot .....	Calgary.
J. W. Stafford .....	Lethbridge.
W. H. Hanna .....	Red Deer.
Mr. Jefferson .....	Grouard.
Geo. H. MacDonell .....	Medicine Hat.
Jas. Linn .....	Grande Prairie.



### First Prize

Awarded to the Province of Alberta for Best Display Exhibit of any State or Province at the International Dry Farming Congress held at Colorado Springs, Colorado, October 16-20, 1911.



